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"Everything is hard before it is easy" J.W. von Goethe (1749-1832)

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Research Article

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# A new genus and a species for the fauna of Turkey (Lepidoptera, Pyralidae)

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**Abstract**: A new genus and a species for the fauna of Turkey (*Lepidoptera, Pyralidae*). *Cesa News* 129: 1-5, 10 figs. 1 map.

The genus and the species, *Amphithrix sublineatella* (Stgr.) are recorded from S. Turkey (Hatay Province) for the first time. External morphology, male and female genitalia, as well as the tympanal organs are illustrated and discussed. A distributional map is also prepared for the species. **Key words**: *Lepidoptera, Pyralidae, Amphithrix sublineatella*, Hatay, fauna, genitalia, tympanal organ, Turkey.

During the short entomological excursion to the vicinity of Meydan village, on the border of Syria (Hatay Province, S. Turkey) in early May 2015, the authors recorded numerous vernal species of moths, inhabiting at the scrubland vegetation zone of the Mediterranean coast (Fig. 1). Among them, a large number of the specimens of a phycitine species is identified by the authors as *Amphithrix sublineatella* (Stgr.). The faunistical information of this species, together with the genitalia and tympanal organs are given and discussed below.

Staudinger (1859) described the species from "Chiclana" (South Spain) with the name combination "Nephopteryx sublineatella". He also mentioned the generic status with his following expression "Diese Art muss vielleicht ein eigenes Genus bilden...". Ragonot (1893) established a new genus, Amphithrix, with the monotypic type-species: Nephopteryx sublineatella Stgr. Meyrick (1935) described also new genus and species from Spain (Burgos), "Horistacha ogmosema", which is currently considered as synonymous with A. sublineatella (Stgr.).

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In the present time, Leraut (2014) re-described and illustrated this species, with the distributional information in Mediterranean region of Europe. In the countries of East Mediterranean (Israel, Lebanon, Cyprus) this species was also reported in the past. It has not been found from Turkey so far. Therefore, the present record from Meydan (Samandağ) is the first one for the fauna of Turkey (Koçak & Kemal, 2007, 2009; Kemal & Koçak, 2015). It may also be found in the coastal region of the whole southern Turkey.

The larval food-plant of this species was first reported by Staudinger (1859) as "Helichrysum serotinum" from Spain. Klimesch (1942) was also mentioned "Helychrysum italicum" from Gravosa (Croatia). Leraut (2014) stated the larval food-plants: "Helichrysum angustifolium [=italicum], H. serotinum [=italicum], H. stoechas, and Phagmalon sordium". As a result of these, Helichrysum italicum, H. stoechas, and Phagnalon sordium (Asteraceae) remain the larval food-plant names of Amphithrix sublineatella (Stgr.).

A remarkable number of specimens of *Amphithrix sublineatella* (Stgr.) are collected by the light trap<sup>2</sup>. Externally, the species shows sexual dimorphism (Figs. 2,3). In the male, the antenna pectinate at basal half, with a more or less developed swollen structure at base; covered densely with white scales at basal 1/3; dark grey at outer 2/3, with a white ring in the middle (Fig. 4). In the female, the antenna simple, filiform. Size and wing markings of the sexes are similar. Forewing narrow, greyish, longitudinally striated slightly. Several black marginal dots visible. Hindwing greyish basally, outer parts darker in colour. Ciliae simple, greyish.

The male genitalia, and scent organ are illustrated below (Fig. 5). Especially hook-shaped structure on the valva is remarkable. Aedeagus slender and straight, without cornutus. The female genitalia is also illustrated (Fig. 6). Apophyse posterior longer and thiner than anterior one. Ductus bursae membraneous, short and thick; bursa copulatrix membraneous, without signum. Tympanal organs of the male and female are illustrated here for the first time (Figs. 7-10). No significant difference is seen between the sexes.

The species is nocturnal in Hatay Province, with the flight time May. Leraut (2014) stated its flight as June-July.

A distributional map is also given below (Map 1).

Material studied: 27♂♀, South Turkey, Hatay Province, Samandağ, Meydan village, Karabucak (65Ka3) 35m above sea level, 12 5 2015, collected by the authors; GP2233♂, 2505♂, 2506♀ (coll. Cesa).

All the preparations, and the photographs belong to the first author (in archive Cesa).

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<sup>&</sup>lt;sup>2</sup> https://archive.org/details/ASimpleButEffectiveLightTrapForInsectsPaitBvTheCesa



Fig. 1 – Habitat of Amphithrix sublineatella. S. Turkey, Hatay Pr., Samandağ, Meydan village, Karabucak 35m, 8 5 2015.



Figs. 2, 3 - Amphithrix sublineatella, upperside of male (left), and female (right).



**Figs. 4, 5** - *Amphithrix sublineatella*, male antenna with enlarged sexual character (left); male genitalia with scent organ (right), GP2505?

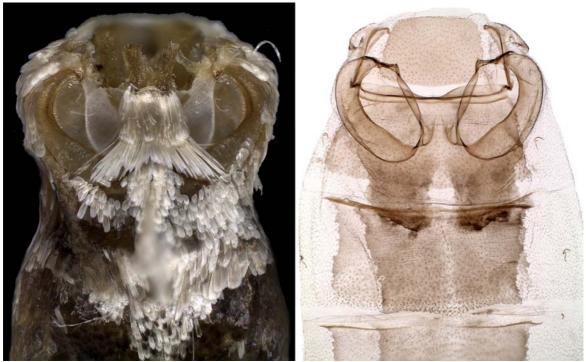


**Fig. 6** - *Amphithrix sublineatella*, female genitalia, GP2506♀.

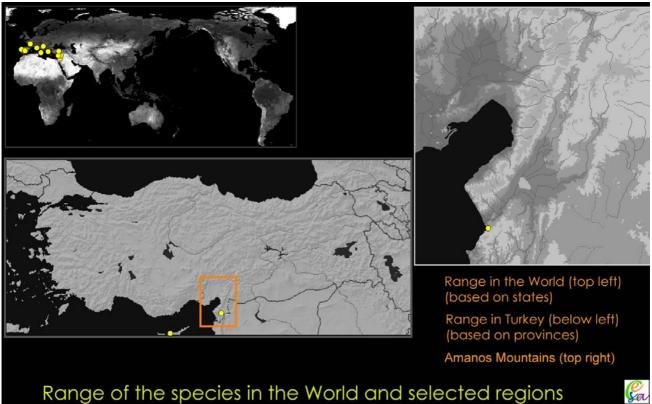


Fig. 7, 8 - Amphithrix sublineatella, male tympanal organ: before preparation (left), after preparation (right), GP2505\$\displaystyle{\display





**Figs. 9, 10** - *Amphithrix sublineatella*, female tympanal organ: before preparation (left), after preparation (right), GP2506♀.



**Map 1** – Distribution of *Amphithrix sublineatella* (Stgr.).

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